



Missouri Department of Natural Resources

PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: September 15, 2006

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, St. Louis Regional Office, 7545 South Lindbergh, Suite 210, St. Louis, Missouri 63125, ATTN: Thomas M. Siegel, Chief, Permits and Engineering. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curd v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by **October 15, 2006** or received in our office by 5:00 p.m. on **October 18, 2006**. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.mo.gov/env/wpp/wpcp-pn.htm> or at the Department of Natural Resources, St. Louis Regional Office, 7545 S. Lindbergh, Suite 210, St. Louis, Missouri 63125, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: September 15, 2006

Permit Number: MO-0081426

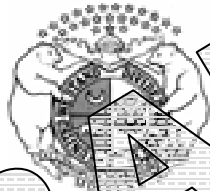
St. Louis Regional Office

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
St. Joseph's Hill Infirmary St. Joseph Road Eureka, MO 63025	Franciscan Missionary Brothers St. Joseph Road Eureka, MO 63025
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Tributary to La Barque Creek Sec. 33, T43N, R3E, Jefferson County	Domestic, reissuance

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0081426

Owner: Franciscan Missionary Brothers.
Address: St. Joseph Road, Eureka, MO 63025

Continuing Authority: Same as above
Address: Same as above

Facility Name: St. Joseph's Hill Infirmary
Facility Address: St. Joseph Road, Eureka, MO 63025

Legal Description: SE ¼, SE ¼, SE ¼, Sec. 33, T43N, R3E, Jefferson County

Receiving Stream: Tributary to La Barque Creek (P)
First Classified Stream and ID: Tributary to La Barque Creek (P) (02033)
USGS Basin & Sub-watershed No.: (07140102 070005)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 - **Private Health Care** - SIC #4952
Single cell aerated lagoon/sludge is retained in lagoon.
Design population equivalent is 200.
Design flow is 20,000 gallons per day
Actual flow is 14,470 gallons per day.
Design sludge production is 1.4 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date
MO 780-0041 (10-93)

Mike Struckhoff., Director, St. Louis Regional Office

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 5	
					PERMIT NUMBER MO-0081426	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect until March 31, 2009 . Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001 (Note 1)</u>						
Flow	MGD	*		*	Once/ month	24 hour estimate
Biochemical Oxygen Demand ₅	mg/l		60	30	Once/ quarter**	grab
Total Suspended Solids	mg/l		120	80	Once/ quarter**	grab
Temperature	°C	*		*	Once/ quarter**	grab
Ammonia Nitrogen	mg/L	*		*	Once/ quarter**	grab
pH – Units	SU	***		***	Once/ quarter**	grab
Total Residual Chlorine (TRC)	mg/L	*		*	Once/ quarter**	grab
Fecal Coliform ****	#/100mL	*		*	Once/ quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring and reporting requirement only.
- ** Once per quarter in the months of January, April, July, and October.
- *** pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units..
- **** Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31. Samples are to be taken during the months of April, July, and October.

Note 1 – A formal water quality review has not been conducted.

PAGE NUMBER 3 of 5						
PERMIT NUMBER MO-0081426						
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS						
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective April 1, 2009 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below::						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001 (Note 1)</u>						
Flow	MGD	*		*	Once/ month	24 hour estimate
Biochemical Oxygen Demand ₅	mg/L	*	60	30	Once/ quarter**	grab
Total Suspended Solids	mg/L	*	120	80	Once/ quarter**	grab
Temperature	°C	*		*	Once/ quarter**	grab
Ammonia Nitrogen	mg/L	*		*	Once/ quarter**	grab
pH – Units	SU	***		***	Once/ quarter**	grab
Total Residual Chlorine (TRC) (Note 2)	mg/L	0.019		0.010	Once/ quarter**	grab
Fecal Coliform ****	#/100mL	1000		400	Once/ quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring and reporting requirement only.
- ** Once per quarter in the months of January, April, July, and October.
- *** pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units..
- **** Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31. Samples are to be taken during the months of April, July, and October.

Note 1 – A formal water quality review has not been conducted.

Note 2- This permit contains a Total Residual Chlorine (TRC) limit.

- a. If the TRC limit in this permit is 0.01 mg/L to 0.2mg/L, you must use an analytical method that has a quantification limit of no greater than 0.05 mg/L TRC. For reporting purposes on the Discharge Monitoring Report (DMR), all analytical values below 0.05 mg/L shall be reported as “<quantlim”. All analytical values at or above the quantification limit of 0.05 mg/l shall be reported as the measured value. The Permittee shall report the quantification limit in the “Remarks” section of the DMR. The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average. The daily effluent value will be considered equal to 0 mg/L if it is below the quantification limit.
- b. If the TRC limit in this permit is 1.0 mg/L; you must use an analytical method with a quantification limit between 0.2 and 0.5 mg/L. All analytical values below the quantification limit shall be reported as “<quantlim”. All analytical values at or above the quantification limit shall be reported as the measured value. The average monthly effluent values for TRC will be determined by assuming that analytical results below the quantification limit are equivalent to 0 mg/L when calculating the monthly average. The daily effluent value will be considered equal to 0 mg/l if it is below the quantification limit.
- c. Disinfection is required year-round unless the permit specifically states that “final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31”. If your permit does not require disinfection during the non-recreational months, do not chlorinate during those months.
- d. If chlorine is used as a disinfectant then dechlorination is required and Total Residual Chlorine (TRC) limits are applicable.
- e. If chlorine was not used during a given sampling period, an analysis is not necessary. Report the TRC as “0 mg/L”.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
 - (c) That the effluent limit established in part A of the permit will be exceeded.
5. Report as no-discharge when a discharge does not occur during the report period.
6. Water Quality Standards
 - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

C. SPECIAL CONDITIONS (continued)

7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
- (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) Permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

D. SCHEDULE OF COMPLIANCE

The final daily maximum and monthly average Fecal Coliform limits of 1000mg/L and 400 mg/L and Total Residual Chlorine (TRC) limits of 0.019 mg/L and 0.010mg/L, respectively, shall become effective **April 1, 2009**

1. By **November 1, 2007**, submit plans and specifications(prepared by a registered professional engineer, licensed to practice in Missouri), application and appropriate fee for a construction permit to improve the existing treatment facility or eliminate the discharge.
2. By **April 1, 2009** this project must be completed according to the approved plans and specifications, and the final effluent limitations must be met.

Date of Fact Sheet: August 21, 2006

Date of Public Notice: September 15, 2006

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
FACT SHEET

This Fact Sheet explains the applicable regulations and rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0081426

FACILITY NAME: St. Joseph's Hill Infirmary

OWNER NAME: Franciscan Missionary Brothers

LOCATION: Eureka, Missouri

RECEIVING STREAM: Tributary to LaBarque Creek

FACILITY CONTACT PERSON: Thomas Bollinger TEL (636) 587-3661

FACILITY DESCRIPTION AND RATIONALE

This facility consists of a 2 acre lagoon that was originally permitted by the Missouri Water Pollution Board in 1959 (No. 10.005E). In 1976 an Aqualator was installed to raise the D.O. In 1984 an engineering report was done to evaluate the need for disinfection facilities. It was determined that fecal coliform was reduced by natural processes in accordance with the permit limits. This facility serves one home and one Monestary with approximately 25 people currently connected. The design PE for this lagoon is 200.

The previous permit had an **Adjusted design flow** of 5,999 gallons per day, however the discharge monitoring reports over the past two years indicate an average flow of 14, 470 gallons per day. The adjusted design flow is being removed.

Fecal Coliform limits are being proposed to protect the Whole Body Contact Recreation(WBCR) Use of the Tributary to LaBarque Creek. A Use Attainability Analysis Study was conducted on May 23, 2005. Because the stream was used for WBCR since 1975, it has been recommended to retain the WBCR designation. Effluent limitations for **BOD, TSS, and pH** are consistent with those found in the regulation for the receiving waterbody [10 CSR 20-7.015 (8)(B)3A]

In order to expedite the reissuance of State Operating Permits for existing lagoons, a procedure has been established to renew the operating permits for lagoons that have "equivalent to secondary" treatment effluent limits in the absence of a water quality impact study. Permits are being updated to incorporate new water quality criteria, receiving stream classification, or wasteload allocations and monitoring requirements as stipulated by a Total Maximum Daily Load (TMDL). (See attached Water Quality Review Sheet Check List) If there has been no stream survey conducted within the past five years, there is no observable water quality impacts, and the facility has been in compliance with their existing operating permit, then the operating permit will be renewed maintaining the existing lagoon limits with a reopener clause.

Lat/Lon 3824569/-09041064

This permit will be issued for a period of five years.



Missouri Department of Natural Resources
Water Protection Program
Water Pollution Control Branch
NPDES Permits and Engineering Section

Water Quality Review Sheet Check List
Lagoon Operating Permit Renewal

Facility Information

FACILITY NAME: St. Joseph Hill Infirmary PERMIT #: MO-0081426

FACILITY TYPE: 1 cell lagoon AGE: 45+ years

Outfall Characteristics

OUTFALL	DESIGN FLOW (MGD)	ACTUAL FLOW (MGD)	ACTUAL FLOW/DESIGN FLOW
001	.020	.015	75 %

Effluent Characteristics

Biochemical Oxygen Demand (BOD ₅)	In Compliance <input checked="" type="checkbox"/>	Significant Noncompliance <input type="checkbox"/>
Total Suspended Solids (TSS)	In Compliance <input checked="" type="checkbox"/>	Significant Noncompliance <input type="checkbox"/>
Percent Removal (>65%) BOD & TSS	In Compliance <input type="checkbox"/>	Significant Noncompliance <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

Effluent Limit/Monitoring Requirement Frequency at regulatory minimum: Yes ☒ No ☐

Receiving Waterbody Information

WATERBODY NAME: Tributary to LaBarque Creek CLASS: P
WATERBODY NAME: _____ CLASS: _____

Discharge to or within two (2) miles of a losing stream (10 CSR 20-7.031, Table J or as determined by GSRAD) ☐

Discharge to or within two (2) miles of a classified waterbody designated for whole body contact recreation ☒

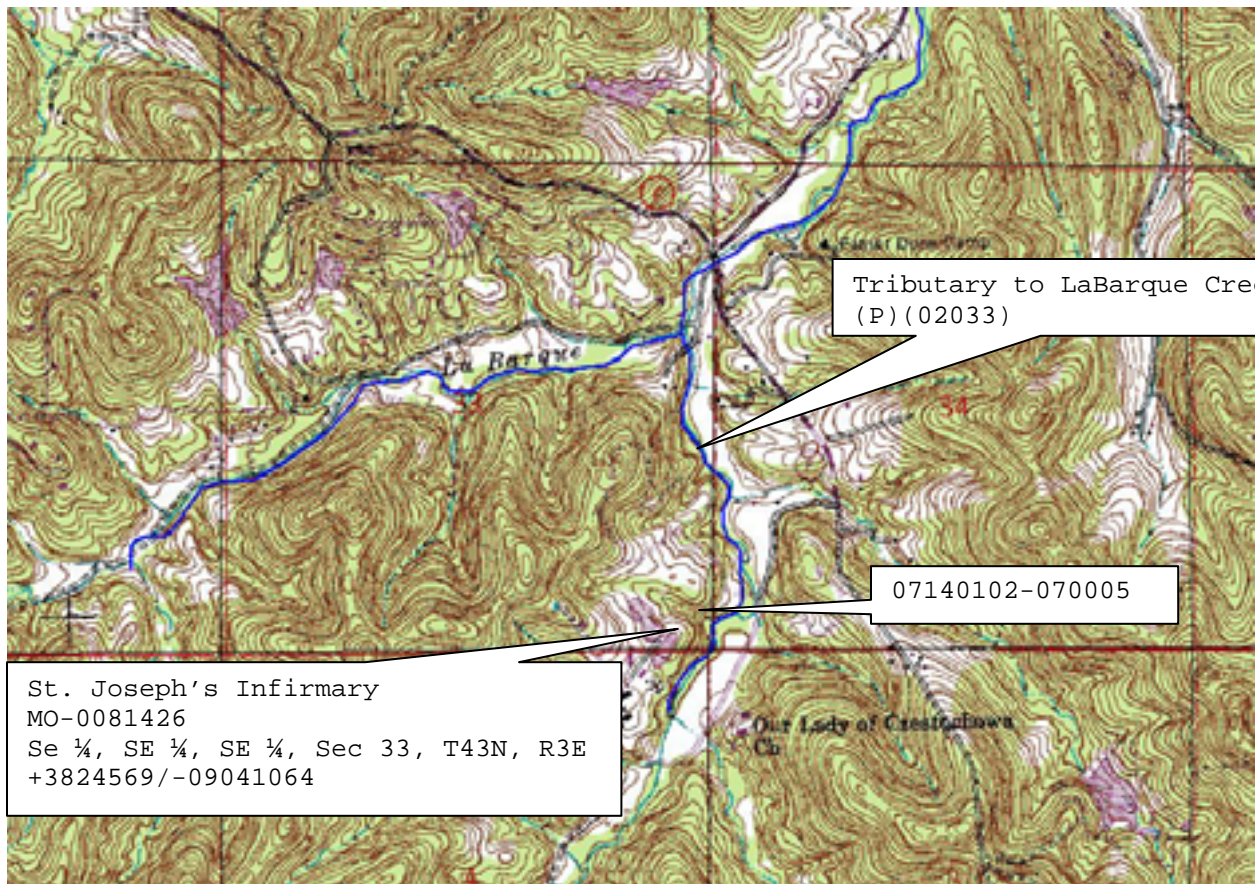
Use Attainability Analysis Conducted ☒

Stream Survey Conducted within the past five (5) years ☐ Observed water quality impacts ☐

If the facility discharges to any of the waterbody types below, is within an area experiencing rapid development, or if a site-specific water quality impact study has been conducted, this form is not applicable.

Lake/Reservoir ☐ 303(d) Waterbody ☐ Metropolitan No-Discharge Stream ☐

Outstanding National/State Resource Water and Drainages Thereto ☐



Tributary to LaBarque Creek
(P) (02033)

07140102-070005

St. Joseph's Infirmary
MO-0081426
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